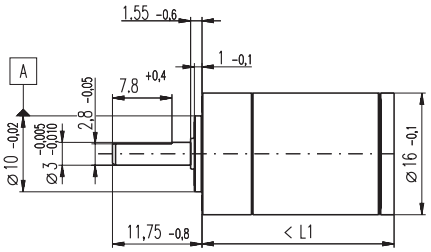
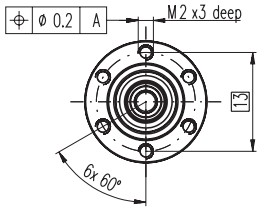
Planetary Gearhead GP 16 M ∅16 mm, 0.1 - 0.3 Nm

Sterilisable





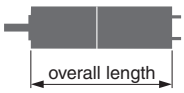
M 1:1

Technical Data

Planetary Gearhead					straight teeth
Output shaft					stainless steel, hardened
Bearing at output					preloaded ball bearings
Radial play, 6 mm from flange					max. 0.08 mm
Axial play at axial load				< 4 N	0 mm
				> 4 N	max. 0.05 mm
Max. permissible axial load					50 N
Max. permissible force for press fits					100 N
Sense of rotation, drive to output					=
Recommended input speed					< 8000 rpm
Recommended temperature range					-15 ... +100°C
Extended area as option					-35 ... +100°C
Number of stages	1	2	3	4	5
Max. radial load, 6 mm from flange	10 N	15 N	20 N	20 N	20 N

Stock program
Standard program
Special program (on request)

Order Number	312908	312910	312913	312916	312917	312920	312922	312925
Gearhead Data								
1 Reduction	4.4:1	19:1	84:1	157:1	370:1	690:1	1621:1	3027:1
2 Reduction absolute	$^{57}/_{13}$	$^{3249}/_{169}$	$^{185193}/_{2197}$	$^{19683}/_{125}$	$^{10556001}/_{28561}$	$^{1121931}/_{1625}$	$^{601692057}/_{371293}$	$^{63950067}/_{21125}$
3 Max. motor shaft diameter mm	2	2	2	1.5	2	2	2	2
Order Number	312909	312911	312914		312918	312921	312923	312926
1 Reduction	5.4:1	24:1	104:1		455:1	850:1	1996:1	3728:1
2 Reduction absolute	$^{27}/_{5}$	$^{1539}/_{65}$	$^{87723}/_{845}$		$^{5000211}/_{10985}$	$^{531441}/_{625}$	$^{285012027}/_{142805}$	$^{30292137}/_{8125}$
3 Max. motor shaft diameter mm	1.5	2	2		2	1.5	2	2
Order Number		312912	312915		312919		312924	312927
1 Reduction		29:1	128:1		561:1		2458:1	4592:1
2 Reduction absolute		$^{729}/_{25}$	$^{41553}/_{325}$		$^{2368521}/_{4225}$		$^{135005697}/_{54925}$	$^{14348907}/_{3125}$
3 Max. motor shaft diameter mm		1.5	2		2		2	1.5
4 Number of stages	1	2	3	3	4	4	5	5
5 Max. continuous torque Nm	0.10	0.15	0.20	0.20	0.25	0.25	0.30	0.30
6 Intermittently permissible torque at gear output Nm	0.150	0.225	0.300	0.300	0.375	0.375	0.450	0.450
7 Max. efficiency %	90	81	73	73	65	65	59	59
8 Weight g	25	28	32	32	36	36	41	41
9 Average backlash no load °	1.4	1.6	2.0	2.0	2.4	2.4	3.0	3.0
10 Mass inertia gcm²	0.07	0.05	0.05	0.04	0.05	0.05	0.05	0.05
11 Gearhead length L1 mm	20.6	24.2	27.8	27.8	31.4	31.4	35.0	35.0



Combination

+ Motor	Page	+ Tacho / Brake	Page	Overall length [mm] = Motor length + gearhead length + (tacho / brake) + assembly parts							
EC 16, 40 W, ster.	158			76.6	80.2	83.8	83.8	87.4	87.4	91.0	91.0

Application	Sterilisation information	
Medicine / surgery / chemicals	The motor can be sterilised at least 100 times in autoclave. No need to dismantle.	
Hand tools that can be sterilised, such as bone saw, bone drilling and grinding machine	Sterilisation with steam	
Dermatological and dental tools	Temperature	+134°C ± 4°C
Infusion pumps	Compression pressure up to	2.3 bar
ECG	Rel. humidity	100 %
Therapy aid, analysis and dialysis equipment	Cycle length	20 minutes